

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF MICHIGAN**

HORIZON GLOBAL AMERICAS  
INC.,

*Plaintiff,*

v.

CONTINENTAL AUTOMOTIVE  
SYSTEMS, INC.,

*Defendant.*

Case No. 2:20-cv-10536

**FIRST AMENDED COMPLAINT**

Plaintiff Horizon Global Americas Inc. (“Horizon”), for its complaint against Continental Automotive Systems, Inc. (“Continental”), states as follows.

**NATURE OF ACTION**

1. This is an action for damages and injunctive relief arising under the United States patent laws, 35 U.S.C. § 271 *et seq.*, to remedy the infringement by Continental of U.S. Patent Nos. 8,789,896 (the “‘896 patent”), 9,758,138 (the “‘138 patent”) and 10,040,437 (the “‘437 patent”) (collectively, the “Patents”).

2. Horizon is the leading designer, manufacturer and distributor of a wide variety of high-quality, custom-engineered towing, trailering, cargo management other related accessory products in North America and Europe. As a global leader in innovative towing and trailering equipment, Horizon has developed and established

highly valuable portfolio related to its innovative products, including those in the Patents, which are directed to methods of controlling braking of a towed vehicle.

3. Continental, without authorization from Horizon, makes, uses, offers for sale, sells and/or imports products that infringe upon Horizon's patented technology. Accordingly, Horizon seeks to enjoin Continental's ongoing patent infringement, and obtain monetary relief for the harm Continental has caused.

### **THE PARTIES**

5. Horizon is a Delaware corporation with a principal place of business at Haylard Dr. #100, Plymouth, Michigan, 48170. Horizon was previously known as Cequent Performance Products, Inc. and Cequent Towing Products, Inc.

6. Upon information and belief, Continental is a Delaware corporation, with its principal place of business in Auburn Hills, Michigan. Continental manufactures, sells and imports brake control systems and devices, including an integrated trailer brake controller. At all times relevant to this lawsuit, Continental offered for sale, sold, distributed and/or imported infringing products to customers throughout the United States and elsewhere.

### **JURISDICTION AND VENUE**

7. This Court has subject matter jurisdiction over Horizon's patent infringement claims under 28 U.S.C. §§ 1331 and 1338(a) because they arise

federal law and, more specifically, under the U.S. Patent Act, 35 U.S.C. § 1 *et seq.*

8. This Court has personal jurisdiction over Continental at least because among other things, upon information and belief, Continental has offices in Michigan, does business in Michigan, and offers for sale products, including infringing products, anywhere in the U.S. including in Michigan and to Michigan businesses or individuals. By willfully infringing the Patents, Continental is intentionally causing tortious harm to Horizon in Michigan.

9. Venue is proper under 28 U.S.C. § 1400 because Continental is subject to personal jurisdiction in this district under Michigan law and, therefore, “resides” in this district according to federal law, because Continental has committed acts of infringement in Michigan, and because Continental has a regular and established place of business in Michigan.

## **FACTUAL BACKGROUND**

### **A. Horizon’s Innovations and the Patents**

10. Horizon is one of the world’s leading manufacturers of towing and trailering equipment. For decades, Horizon and its predecessors and affiliates have designed, produced, manufactured, distributed, and marketed a wide array of high-quality and custom-engineered products and accessories for original equipment manufacturers, as well as aftermarket trailer equipment manufacturers, wholesaler-distributors, and retail markets in Northern America.

11. Horizon is home to some of the most recognized brands in the towing and trailering industry, including: Reese®, Draw-Tite®, Bulldog®, Fulton®, Tekonsha®, and Westfalia®.

12. Horizon is committed to providing cutting-edge and best-in-class products to its consumers. In recognizing the value of intellectual property and patented technology, Horizon has developed and established a highly valuable patent portfolio related to its innovations.

13. To this end, Horizon currently owns the ‘896 patent, the ‘138 patent, and the ‘437 patent, all directed to methods of controlling braking of a towed vehicle.

14. The ‘896 patent was duly and legally issued by the United States Patent and Trademark Office (“USPTO”) on July 29, 2014. A true and correct copy of the ‘896 patent is attached hereto as Exhibit A.

15. The ‘896 patent is valid and enforceable.

16. The ‘138 patent was duly and legally issued by the USPTO on September 12, 2017. A true and correct copy of the ‘138 patent is attached hereto as Exhibit B.

17. The ‘138 patent is valid and enforceable.

18. The ‘437 patent was duly and legally issued by the USPTO on August 7, 2018. A true and correct copy of the ‘437 patent is attached hereto as Exhibit C.

19. The ‘437 patent is valid and enforceable.

20. Continental has knowledge of and is aware of the Patents at least as of December 13, 2019, when Horizon provided claim charts to Continental regarding its infringement of the Patents.

**B. Continental's Infringement of the Patents**

21. Continental has made, used, sold, and offered to sell, and continues to make, use, sell, and offer to sell, products that infringe the Patents.

22. As a non-limiting example, Continental has sold and continues to sell an integrated trailer brake controller ("ITBC") to Fiat Chrysler Automobiles N.V. ("FCA"), or to its subsidiaries or affiliates, that is incorporated into at least the 2016 RAM 1500 pickup truck, and infringes one or more claims of the '896 patent, the '138 patent and the '437 patent (the "Infringing Product").

**C. Continental Refuses to Cease Infringement of the Patents**

23. After discovering that Continental was selling infringing products, Horizon sought to resolve the dispute without court intervention.

24. Continental, however, has refused to stop selling its infringing products.  
25. Since Continental continues to infringe the Patents, Horizon has had no choice but to bring the present action to defend its patent rights.

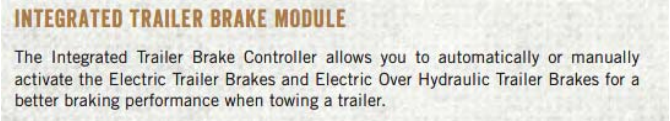
**COUNT I**  
**Infringement of the '896 patent**

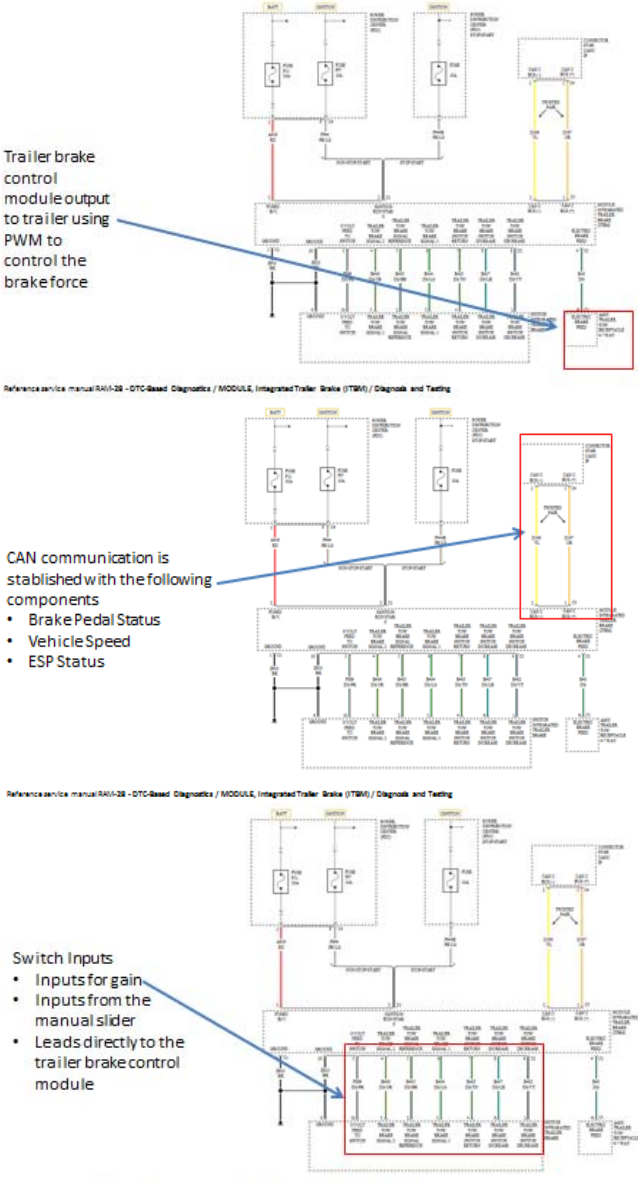
26. Horizon incorporates paragraphs 1-25 as if fully set forth herein.

27. Continental has directly and indirectly infringed, and, upon

and belief, continues to directly and indirectly infringe, the '896 patent at least by making, using, selling, and offering for sale its integrated trailer brake controller.

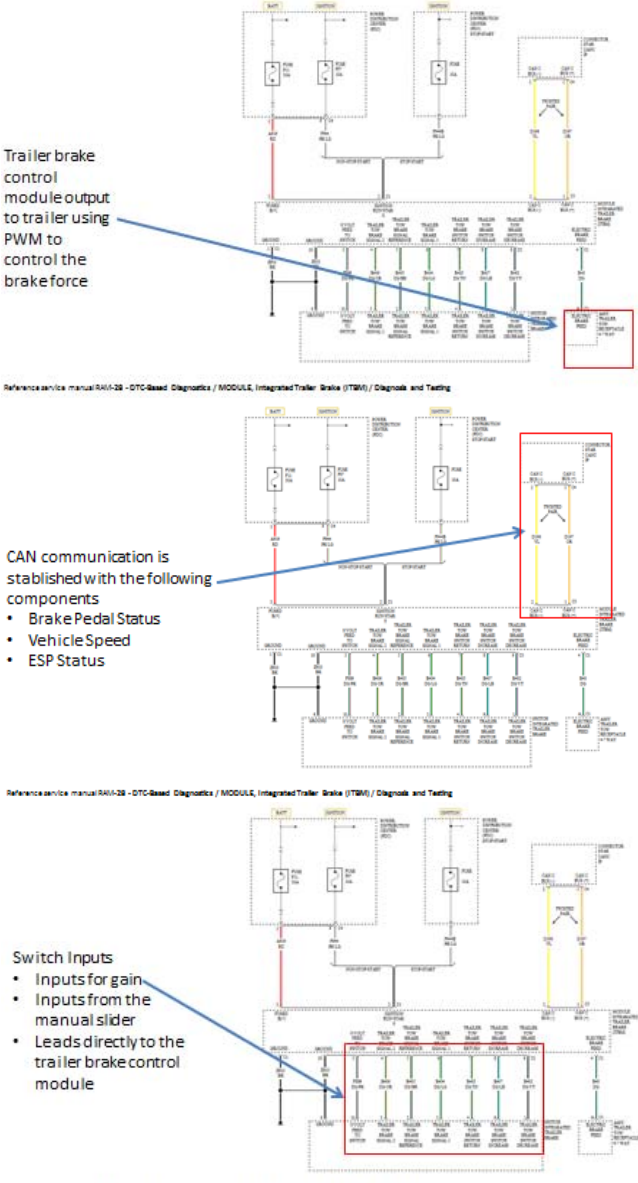
28. As a non-limiting, illustrative example of how Continental's ITBC infringes one or more claims of the '896 patent, below is a comparison chart showing how, for example, Continental's ITBC, as assembled in a FCA 2016 RAM 1500 pickup truck, includes each and every limitation of, for example, claim 1 of the '896 patent.

'896 Patent Claim	Continental's ITBC
1. A method of controlling braking of a towed vehicle, said method comprising:	<p>The ITBC provides a method of controlling braking of a towed vehicle.</p> <p><b>Integrated Trailer Brake Module — If Equipped</b>  Your vehicle may have an Integrated Trailer Brake Module (ITBM) for Electric and Electric Over Hydraulic (EOH) trailer brakes.  (See 2016 Ram Truck 1500/2500/3500 Owner's Manual at pg. 699,  <a href="https://cdn.dealereprocess.net/cdn/servicemanuals/ram/2016-1500.pdf">https://cdn.dealereprocess.net/cdn/servicemanuals/ram/2016-1500.pdf</a>).</p>  <p>(See at pg. 177, 2016 User Guide - Ram Trucks 1500/2500/3500,  <a href="http://www.fcacanada.ca/owners/en/manuals/2016/2016E-">http://www.fcacanada.ca/owners/en/manuals/2016/2016E-</a></p>

'896 Patent Claim	Continental's ITBC
<p>receiving a speed signal based on speed of a towing vehicle, or a towed vehicle, or both said towing vehicle and said towed vehicle;</p>	<p>FCA documents indicate that the ITBC receives a speed signal based on the speed of the towing vehicle or the towed vehicle, or both the towing vehicle and the towed vehicle. The ITBC uses speed and pressure to control trailer brake output. Signals may be processed by other modules, which together with the ITBC module comprise the Trailer Brake Controller.</p>  <p>Trailer brake control module output to trailer using PWM to control the brake force</p> <p>Reference service manual RAV-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITBC) / Diagnostics and Testing</p> <p>CAN communication is established with the following components</p> <ul style="list-style-type: none"> <li>• Brake Pedal Status</li> <li>• Vehicle Speed</li> <li>• ESP Status</li> </ul> <p>Reference service manual RAV-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITBC) / Diagnostics and Testing</p> <p>Switch Inputs</p> <ul style="list-style-type: none"> <li>• Inputs for gain</li> <li>• Inputs from the manual slider</li> <li>• Leads directly to the trailer brake control module</li> </ul> <p>Reference service manual RAV-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITBC) / Diagnostics and Testing</p>

'896 Patent Claim	Continental's ITBC														
receiving a pressure signal based on a brake system of said towing vehicle;	<p>FCA documents indicate that the ITBC receives a pressure signal, based on a brake system of the towing vehicle The ITBC uses speed and pressure to control trailer brake output. Signals may be processed by other modules, which together with the ITBC module comprise the Trailer Brake Controller. According to the "ChangesFromReferencePart.pdf" chart below, the current ITBC monitors brake pressure to calculate trailer brake output.</p> <p style="text-align: center;"><b>"ChangesFromReferencePart.pdf"</b></p> <table border="1" data-bbox="566 699 963 1148"> <thead> <tr> <th>Current feature</th><th>New feature</th></tr> </thead> <tbody> <tr> <td>ITBM monitors brake pressure to calculate trailer brake output.</td><td>ITBM monitors brake torque to calculate trailer brake output</td></tr> <tr> <td>ITBM needs at least two functional magnets to provide trailer brake output.</td><td>ITBM keeps working if only one trailer brake magnet is functional, but warns customer with a telltale in the IC.</td></tr> <tr> <td>ITBM stops working if there's a hydraulic failure in the master cylinder.</td><td>ITBM keeps working in back up mode if there's a hydraulic failure in the master cylinder but all other signals are still available.</td></tr> <tr> <td>N/A</td><td>ITBM will integrate with Driver Assistance Module features.</td></tr> <tr> <td>N/A</td><td>ITBM will integrate with Electronic Parking Brake features.</td></tr> <tr> <td>N/A</td><td>Added diagnostic services for development</td></tr> </tbody> </table> <p style="text-align: center;"><b>FCA ITBM Performance Spec: PF-A0141</b></p> <p><b>8.4.1.1 Speed Compensation</b></p> <p>Because the trailer's brakes are an assist to the vehicle brakes the requirement for trailer braking diminishes as the speed approaches zero, in order to smooth the driving experience it is therefore desirable to reduce the effect of trailer braking at low speeds. For this reason ITBM shall be able to adjust the Brake Output with the speed of the vehicle. This means that at normal driving speeds full braking will be available but as speed diminishes the amount of trailer braking will be reduced for any given rate of deceleration / brake torque.</p>	Current feature	New feature	ITBM monitors brake pressure to calculate trailer brake output.	ITBM monitors brake torque to calculate trailer brake output	ITBM needs at least two functional magnets to provide trailer brake output.	ITBM keeps working if only one trailer brake magnet is functional, but warns customer with a telltale in the IC.	ITBM stops working if there's a hydraulic failure in the master cylinder.	ITBM keeps working in back up mode if there's a hydraulic failure in the master cylinder but all other signals are still available.	N/A	ITBM will integrate with Driver Assistance Module features.	N/A	ITBM will integrate with Electronic Parking Brake features.	N/A	Added diagnostic services for development
Current feature	New feature														
ITBM monitors brake pressure to calculate trailer brake output.	ITBM monitors brake torque to calculate trailer brake output														
ITBM needs at least two functional magnets to provide trailer brake output.	ITBM keeps working if only one trailer brake magnet is functional, but warns customer with a telltale in the IC.														
ITBM stops working if there's a hydraulic failure in the master cylinder.	ITBM keeps working in back up mode if there's a hydraulic failure in the master cylinder but all other signals are still available.														
N/A	ITBM will integrate with Driver Assistance Module features.														
N/A	ITBM will integrate with Electronic Parking Brake features.														
N/A	Added diagnostic services for development														



'896 Patent Claim	Continental's ITBC
<p>generating a brake output signal based on said speed signal and said pressure signal;</p>	<p>FCA documents indicate that the ITBC generates a brake output signal based on the speed signal and a pressure signal. The ITBC uses speed and pressure to control trailer brake output. Signals may be processed by other modules, which together with the ITBC module comprise the Trailer Brake</p>  <p>Trailer brake control module output to trailer using PWM to control the brake force</p> <p>Reference service manual RAV-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITB) / Diagnose and Testing</p> <p>CAN communication is established with the following components</p> <ul style="list-style-type: none"> <li>• Brake Pedal Status</li> <li>• Vehicle Speed</li> <li>• ESP Status</li> </ul> <p>Reference service manual RAV-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITB) / Diagnose and Testing</p> <p>Switch Inputs</p> <ul style="list-style-type: none"> <li>• Inputs for gain</li> <li>• Inputs from the manual slider</li> <li>• Leads directly to the trailer brake control module</li> </ul> <p>Reference service manual RAV-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITB) / Diagnose and Testing</p>

<b>'896 Patent Claim</b>	<b>Continental's ITBC</b>
sending said brake output signal to brakes of said towed vehicle to provide power to said brakes;	FCA documents indicate that the ITBC sends a brake output signal to the brakes of the towed vehicle to provide power to the brakes.
applying said brakes of said towed vehicle based on said brake output signal;	FCA documents indicate that the trailer brakes are applied based on the brake output signal.
determining a relationship between said speed and a speed threshold;	To prove infringement, Horizon obtained a 2016 Ram 1500 vehicle equipped with the Continental ITBC. Horizon operated and tested the vehicle to demonstrate that speed of the towing vehicle, towed vehicle, or both, correlates with braking. Testing demonstrates that the ITBC output is dependent upon speed and brake pedal force, using constant brake output above a speed threshold of 30 MPH and compensated under 30MPH.
applying a function to modify said brake output signal when said speed of the towing vehicle is below said speed threshold;	To prove infringement, Horizon obtained a 2016 Ram 1500 vehicle equipped with the Continental ITBC. Horizon operated and tested the vehicle to demonstrate that speed of the towing vehicle, towed vehicle, or both, correlates with braking. Testing demonstrates that the ITBC output is dependent upon speed and brake pedal force, using constant brake output above a speed threshold of 30 MPH and compensated under 30MPH. When the speed of the towing vehicle is below the speed threshold of 30MPH, the brake output signal is modified.

<b>'896 Patent Claim</b>	<b>Continental's ITBC</b>
wherein said function modifies said brake output based on said speed; and	To prove infringement, Horizon obtained a 2016 Ram 1500 vehicle equipped with the Continental ITBC. Horizon operated and tested the vehicle to demonstrate that speed of the towing vehicle, towed vehicle, or both, correlates with braking. Testing demonstrates that the ITBC output is dependent upon speed and brake pedal force, using constant brake output above a speed threshold of 30 MPH and compensated under 30MPH. When the speed of the towing vehicle is below the speed threshold of 30MPH, the brake output signal is modified.
wherein said brake output signal is not modified based on speed when said speed of said towing vehicle is above said speed threshold.	To prove infringement, Horizon obtained a 2016 Ram 1500 vehicle equipped with the Continental ITBC. Horizon operated and tested the vehicle to demonstrate that speed of the towing vehicle, towed vehicle, or both, correlates with braking. Testing demonstrates that the ITBC output is dependent upon speed and brake pedal force, using constant brake output above a speed threshold of 30 MPH and compensated under 30MPH. When the speed of the towing vehicle is above the speed threshold of 30MPH, the brake output signal is not modified.

29. Continental's ITBC includes each of the limitations in, at least, claim 1 of the '896 patent. Therefore, Continental's ITBC infringes the '896 patent.

30. The only intended and feasible use for Continental's ITBC is as an ITBC.

31. Because the only intended and feasible use of Continental's ITBC is an infringing use, Continental's ITBC has no substantial non-infringing uses.

32. Continental has induced infringement of the '896 patent at least with knowledge of the '896 patent, it intentionally and actively induced end users of Continental's ITBC (through instructions, videos, and otherwise) to use them in a

manner that infringes the '896 patent with specific intent that they do so.

33. Continental has further induced infringement of the '896 patent at least by selling Continental's ITBC to distributors, retailers, and other resellers with specific intent that they infringe the '896 patent by reselling Continental's ITBC to others.

34. Continental has contributed to infringement of the '896 patent at least by selling Continental's ITBC, which has no substantial use other than an infringing use as an ITBC.

35. Continental's direct and indirect infringement of the '896 patent was, and continues to be, willful and deliberate.

36. Horizon has been and will continue to be damaged by Continental's infringing activities. Continental's infringing activities, upon information and belief, have caused loss of business, which in turn hurts the local economy and causes local people to lose their jobs.

37. Horizon has suffered irreparable harm due to Continental's infringement and will continue to be irreparably harmed unless and until Continental is enjoined by this Court.

**COUNT II**  
**Infringement of the '138 Patent**

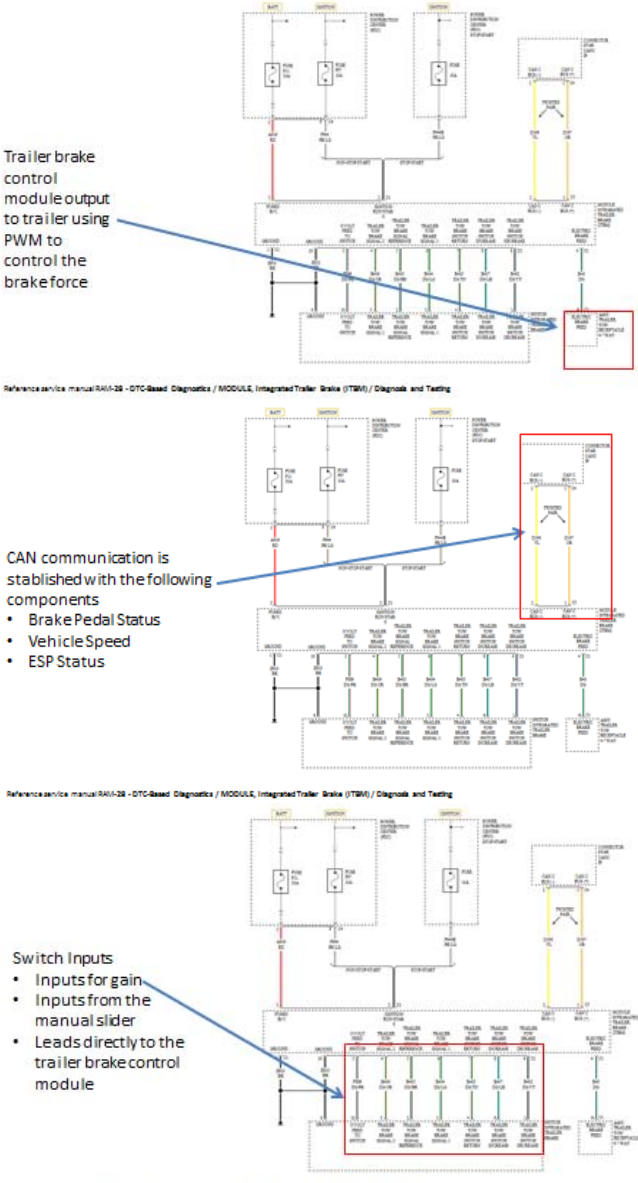
38. Horizon incorporates paragraphs 1-37 as if fully set forth herein.

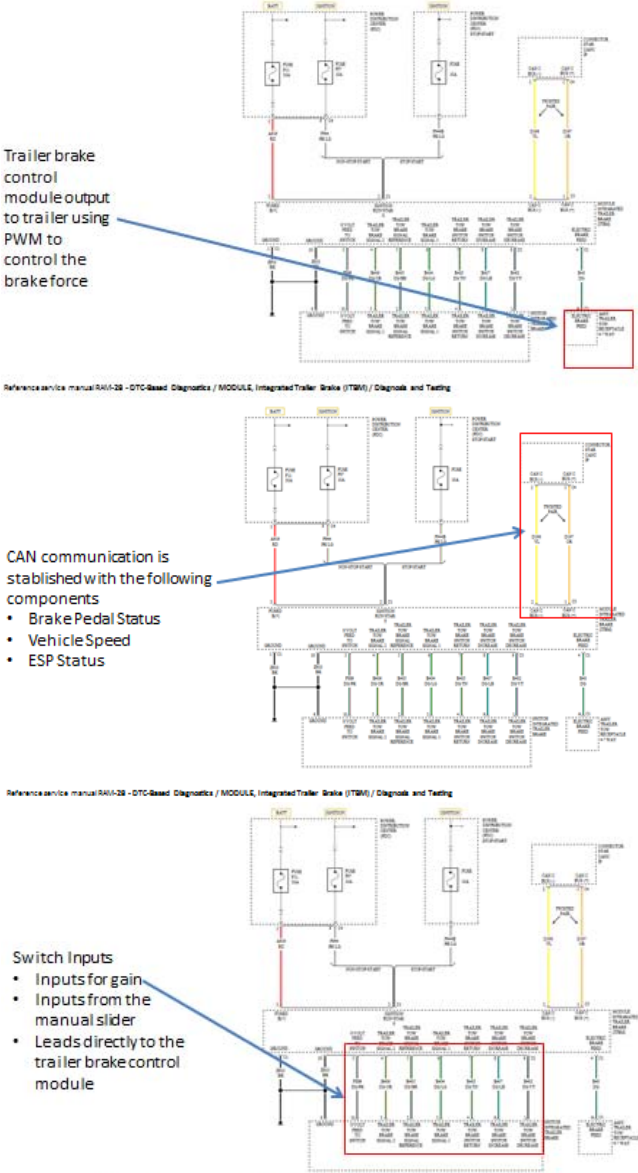
39. Continental has directly and indirectly infringed, and, upon

and belief, continues to directly and indirectly infringe, the '138 patent at least by making, using, selling, and offering for sale its integrated trailer brake controller.

40. As a non-limiting, illustrative example of how Continental's ITBC infringes one or more claims of the '138 patent, below is a comparison chart showing how, for example, Continental's ITBC, as assembled in a FCA 2016 RAM 1500 pickup truck, includes each and every limitation of, for example, claim 1 of the '138 patent.

'138 Patent Claim	Continental's ITBC
1. A method of controlling braking of a towed vehicle, said method comprising:	<p>The ITBC provides a method of controlling braking of a towed vehicle.</p> <p><b>Integrated Trailer Brake Module — If Equipped</b>  Your vehicle may have an Integrated Trailer Brake Module (ITBM) for Electric and Electric Over Hydraulic (EOH) trailer brakes.  (See 2016 Ram Truck 1500/2500/3500 Owner's Manual at pg. 699,  <a href="https://cdn.dealereprocess.net/cdn/servicemanuals/ram/2016-1500.pdf">https://cdn.dealereprocess.net/cdn/servicemanuals/ram/2016-1500.pdf</a>).</p> <div data-bbox="479 1360 1144 1480"> <p><b>INTEGRATED TRAILER BRAKE MODULE</b></p> <p>The Integrated Trailer Brake Controller allows you to automatically or manually activate the Electric Trailer Brakes and Electric Over Hydraulic Trailer Brakes for a better braking performance when towing a trailer.</p> </div> <p>(See at pg. 177, 2016 User Guide - Ram Trucks 1500/2500/3500,  <a href="http://www.fcacanada.ca/owners/en/manuals/2016/2016E-">http://www.fcacanada.ca/owners/en/manuals/2016/2016E-</a></p>

'138 Patent Claim	Continental's ITBC
<p>receiving a speed signal based on speed of a towing vehicle, or a towed vehicle, or both said towing vehicle and said towed vehicle;</p>	<p>FCA documents indicate that the ITBC receives a speed signal based on the speed of the towing vehicle or the towed vehicle, or both the towing vehicle and the towed vehicle. The ITBC uses speed and pressure to control trailer brake output. Signals may be processed by other modules, which together with the ITBC module comprise the Trailer Brake Controller.</p>  <p>Trailer brake control module output to trailer using PWM to control the brake force</p> <p>Reference service manual RAV-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITBC) / Diagnostics and Testing</p> <p>CAN communication is established with the following components</p> <ul style="list-style-type: none"> <li>• Brake Pedal Status</li> <li>• Vehicle Speed</li> <li>• ESP Status</li> </ul> <p>Reference service manual RAV-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITBC) / Diagnostics and Testing</p> <p>Switch Inputs</p> <ul style="list-style-type: none"> <li>• Inputs for gain</li> <li>• Inputs from the manual slider</li> <li>• Leads directly to the trailer brake control module</li> </ul> <p>Reference service manual RAV-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITBC) / Diagnostics and Testing</p>

'138 Patent Claim	Continental's ITBC
<p>generating a brake output signal based on at least said speed signal;</p>	<p>FCA documents indicate that the ITBC generates a brake output signal based on the speed signal and a pressure signal. The ITBC uses speed and pressure to control trailer brake output. Signals may be processed by other modules, which together with the ITBC module comprise the Trailer Brake Controller.</p>  <p>Trailer brake control module output to trailer using PWM to control the brake force</p> <p>Reference service manual RAA-28 - DTC-based Diagnostics / MODULE, Integrated Trailer Brake (ITB) / Diagnose and Testing</p> <p>CAN communication is established with the following components</p> <ul style="list-style-type: none"> <li>• Brake Pedal Status</li> <li>• Vehicle Speed</li> <li>• ESP Status</li> </ul> <p>Reference service manual RAA-28 - DTC-based Diagnostics / MODULE, Integrated Trailer Brake (ITB) / Diagnose and Testing</p> <p>Switch Inputs</p> <ul style="list-style-type: none"> <li>• Inputs for gain</li> <li>• Inputs from the manual slider</li> <li>• Leads directly to the trailer brake control module</li> </ul> <p>Reference service manual RAA-28 - DTC-based Diagnostics / MODULE, Integrated Trailer Brake (ITB) / Diagnose and Testing</p>

<b>‘138 Patent Claim</b>	<b>Continental’s ITBC</b>
sending said brake output signal to brakes of said towed vehicle to provide power to said brakes;	FCA documents indicate that the ITBC sends a brake output signal to the brakes of the towed vehicle to provide power to the brakes.
applying said brakes of said towed vehicle based on said brake output signal;	FCA documents indicate that the trailer brakes are applied based on the brake output signal.
determining a relationship between said speed and a speed threshold;	To prove infringement, Horizon obtained a 2016 Ram 1500 vehicle equipped with the Continental ITBC. Horizon operated and tested the vehicle to demonstrate that speed of the towing vehicle, towed vehicle, or both, correlates with braking. Testing demonstrates that the ITBC output is dependent upon speed and brake pedal force, using constant brake output above a speed threshold of 30 MPH and compensated under 30MPH.
applying a function to modify said brake output signal only when said speed of the towing vehicle is below said speed	To prove infringement, Horizon obtained a 2016 Ram 1500 vehicle equipped with the Continental ITBC. Horizon operated and tested the vehicle to demonstrate that speed of the towing vehicle, towed vehicle, or both, correlates with braking. Testing demonstrates that the ITBC output is dependent upon speed and brake pedal force, using constant brake output above a speed threshold of 30 MPH and compensated under 30MPH. When the speed of the towing vehicle is below the speed threshold of 30MPH, the brake output signal is modified.



<b>'138 Patent Claim</b>	<b>Continental's ITBC</b>
wherein said function modifies said brake output based on said speed; and	To prove infringement, Horizon obtained a 2016 Ram 1500 vehicle equipped with the Continental ITBC. Horizon operated and tested the vehicle to demonstrate that speed of the towing vehicle, towed vehicle, or both, correlates with braking. Testing demonstrates that the ITBC output is dependent upon speed and brake pedal force, using constant brake output above a speed threshold of 30 MPH and compensated under 30MPH. When the speed of the towing vehicle is below the speed threshold of 30MPH, the brake output signal is modified.
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43. Because the only intended and feasible use of Continental's ITBC is an infringing use, Continental's ITBC has no substantial non-infringing uses.

44. Continental has induced infringement of the '138 patent at least with knowledge of the '138 patent, it intentionally and actively induced end users of Continental's ITBC (through instructions, videos, and otherwise) to use them in a

manner that infringes the '138 patent with specific intent that they do so.

45. Continental has further induced infringement of the '138 patent at least by selling Continental's ITBC to distributors, retailers, and other resellers with specific intent that they infringe the '138 patent by reselling Continental's ITBC to others.

46. Continental has contributed to infringement of the '138 patent at least by selling Continental's ITBC, which has no substantial use other than an infringing use as an ITBC.

47. Continental's direct and indirect infringement of the '138 patent was, and continues to be, willful and deliberate.

48. Horizon has been and will continue to be damaged by Continental's infringing activities. Continental's infringing activities, upon information and belief, have caused loss of business, which in turn hurts the local economy and causes local people to lose their jobs.

49. Horizon has suffered irreparable harm due to Continental's infringement and will continue to be irreparably harmed unless and until Continental is enjoined by this Court.

**COUNT III**  
**Infringement of the '437 Patent**

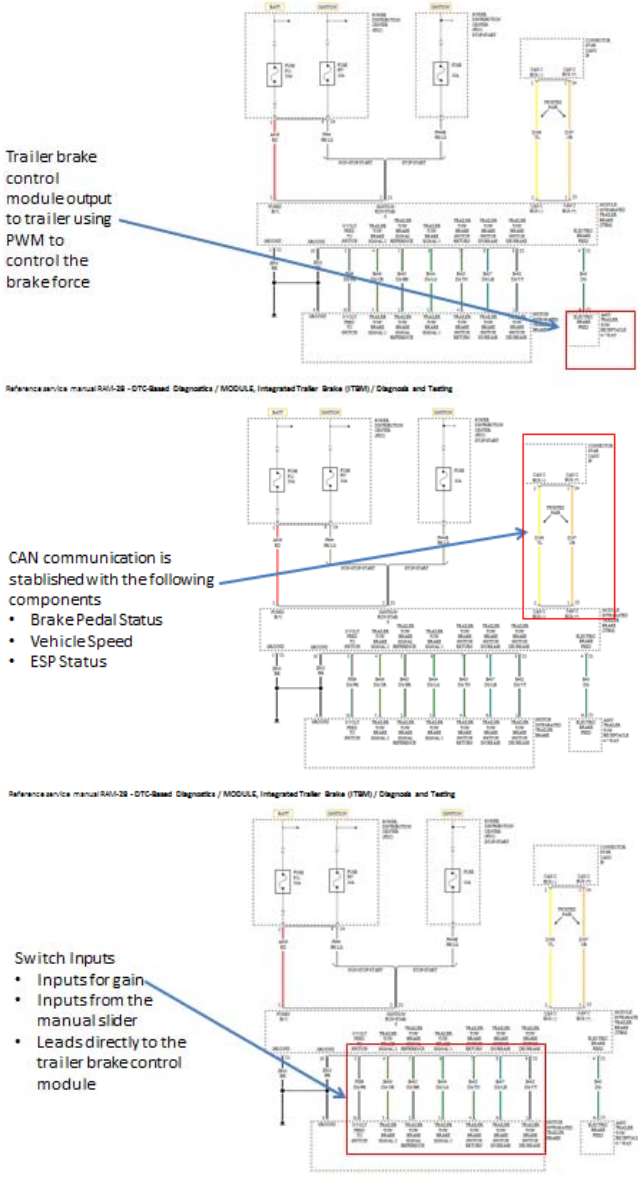
50. Horizon incorporates paragraphs 1-49 as if fully set forth herein.

51. Continental has directly and indirectly infringed, and, upon

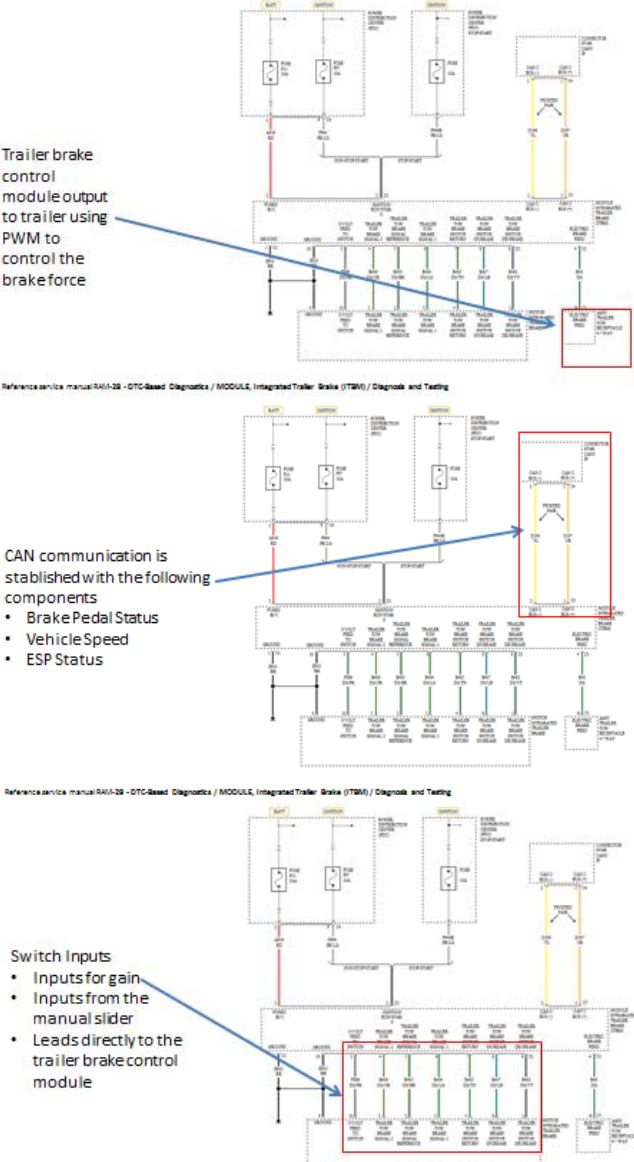
and belief, continues to directly and indirectly infringe, the '437 patent at least by making, using, selling, and offering for sale its integrated trailer brake controller.

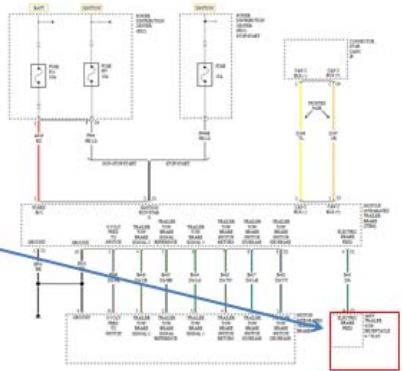
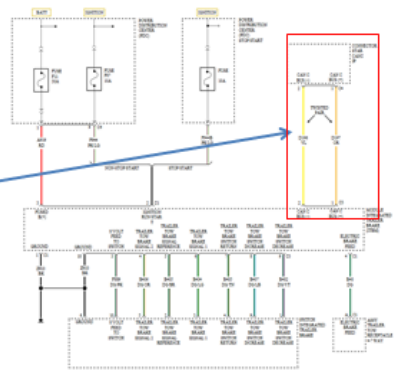
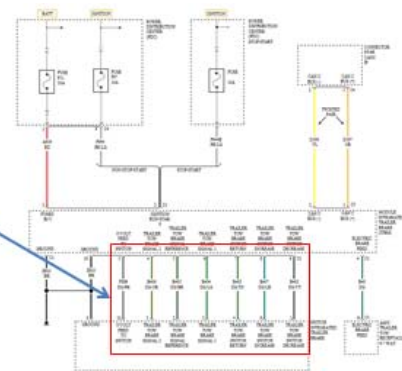
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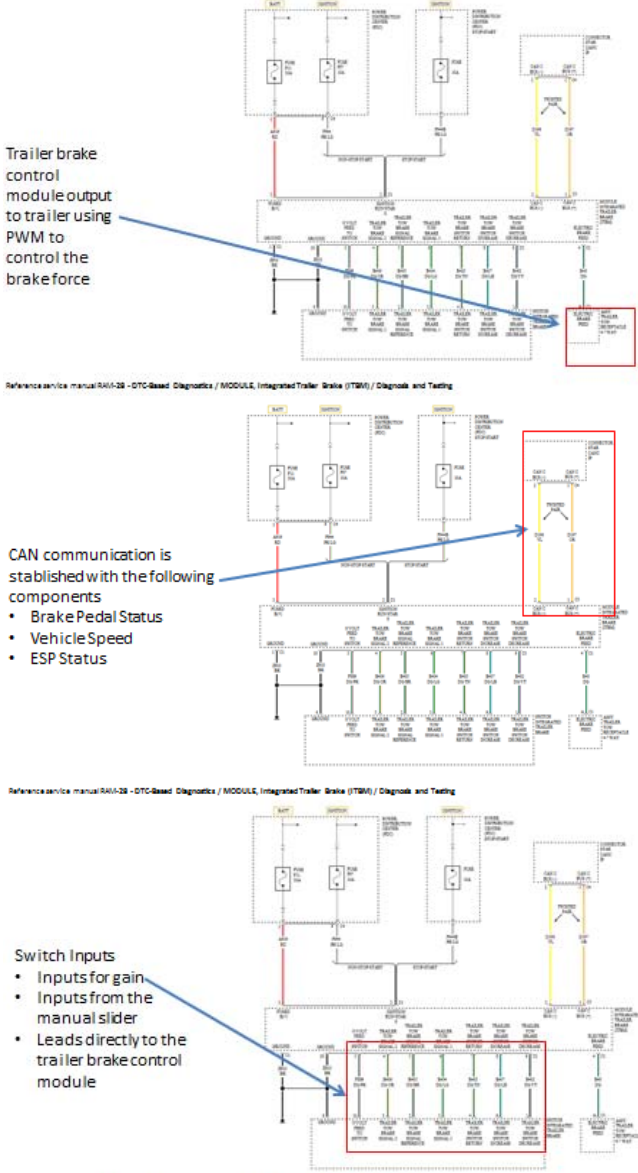
'437 Patent Claim	Continental's ITBC
1. A method for controlling braking of a towed vehicle, the method comprising:	<p>The ITBC provides a method of controlling braking of a towed vehicle.</p> <p><b>Integrated Trailer Brake Module — If Equipped</b>  Your vehicle may have an Integrated Trailer Brake Module (ITBM) for Electric and Electric Over Hydraulic (EOH) trailer brakes.  (See 2016 Ram Truck 1500/2500/3500 Owner's Manual at pg. 699,  <a href="https://cdn.dealereprocess.net/cdn/servicemanuals/ram/2016-1500.pdf">https://cdn.dealereprocess.net/cdn/servicemanuals/ram/2016-1500.pdf</a>).</p> <div data-bbox="480 1358 1143 1478"> <p><b>INTEGRATED TRAILER BRAKE MODULE</b></p> <p>The Integrated Trailer Brake Controller allows you to automatically or manually activate the Electric Trailer Brakes and Electric Over Hydraulic Trailer Brakes for a better braking performance when towing a trailer.</p> </div> <p>(See at pg. 177, 2016 User Guide - Ram Trucks 1500/2500/3500,  <a href="http://www.fcacanada.ca/owners/en/manuals/2016/2016E-">http://www.fcacanada.ca/owners/en/manuals/2016/2016E-</a></p>

'437 Patent Claim	Continental's ITBC
<p>receiving a first signal at a brake controller via a towing vehicle communication bus,</p>	<p>FCA documents indicate that the ITBC receives a first signal, for example, a speed signal or a pressure signal. RAM wiring diagrams show connection of a communication bus to the ITBC, and no other or individual signal lines are connected to the ITBC. Tests show that the ITBC receives signals from the communication bus.</p>  <p>Trailer brake control module output to trailer using PWM to control the brakeforce</p> <p>CAN communication is established with the following components</p> <ul style="list-style-type: none"> <li>• Brake Pedal Status</li> <li>• Vehicle Speed</li> <li>• ESP Status</li> </ul> <p>Switch Inputs</p> <ul style="list-style-type: none"> <li>• Inputs for gain</li> <li>• Inputs from the manual slider</li> <li>• Leads directly to the trailer brake control module</li> </ul> <p>Reference service manual RAM-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITB) / Diagnose and Testing</p> <p>Reference service manual RAM-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITB) / Diagnose and Testing</p> <p>Reference service manual RAM-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITB) / Diagnose and Testing</p>

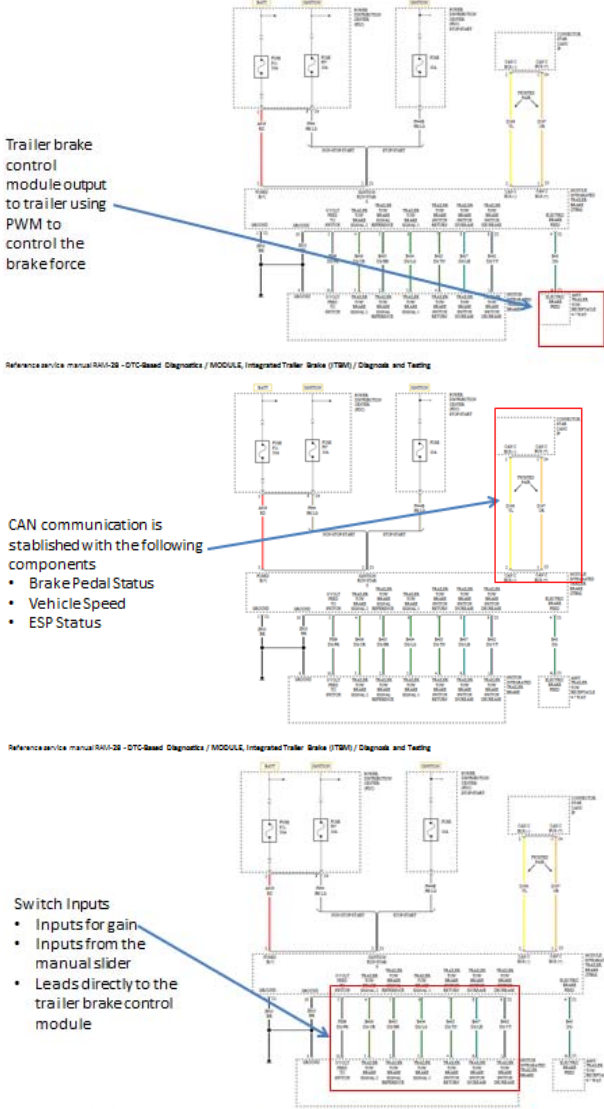
<b>‘437 Patent Claim</b>	<b>Continental’s ITBC</b>
the first signal relating to at least one operating condition of the towing vehicle; and	<p>FCA documents indicate that the ITBC receives a first signal relating to at least one operating condition of the towing vehicle, for example, a speed of the towing vehicle or a brake pressure of the towing vehicle.</p> <p>To prove infringement, Horizon obtained a 2016 Ram 1500 vehicle equipped with the Continental ITBC. Horizon operated and tested the vehicle to demonstrate that the ITBC output varies with brake pedal pressure and vehicle speed indicating communication of at least one signal over communication bus.</p>

'437 Patent Claim	Continental's ITBC
<p>sending a second signal from the brake controller to brakes of the towed vehicle,</p>	<p>FCA documents indicate that the ITBC sends a second signal from the brake controller to the brakes of the towed vehicle. RAM wiring diagrams show that the output of the ITBC is sent to the trailer brakes.</p>  <p>Trailer brake control module output to trailer using PWM to control the brake force</p> <p>CAN communication is established with the following components</p> <ul style="list-style-type: none"> <li>• Brake Pedal Status</li> <li>• Vehicle Speed</li> <li>• ESP Status</li> </ul> <p>Switch Inputs</p> <ul style="list-style-type: none"> <li>• Inputs for gain</li> <li>• Inputs from the manual slider</li> <li>• Leads directly to the trailer brake control module</li> </ul> <p>Reference service manual RAM-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITBC) / Diagnose and Testing</p>
<p>the second signal based on the first signal; and</p>	<p>FCA documents indicate that the second signal sent by the ITBC sends a second signal from the brake controller to the brakes of the towed vehicle. The controller output is based on, for example, pedal pressure.</p>

'437 Patent Claim	Continental's ITBC
<p>wherein the towing vehicle communication bus is configured to communicate electronic signals and</p>	<p>RAM wiring diagrams show the communication bus is configured to communicate electronic signals. Many components are shown communicating over the communication bus, and no other or individual signal lines are connected to the ITBC. Also, to prove infringement, Horizon obtained a 2016 Ram 1500 vehicle equipped with the Continental ITBC. Horizon operated and tested the vehicle to demonstrate that the ITBC output varies with brake pedal pressure and vehicle speed indicating communication of at least one signal over</p> <p>Trailer brake control module output to trailer using PWM to control the brakeforce</p>  <p>Reference service manual RAM-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITBM) / Diagnose and Testing</p> <p>CAN communication is established with the following components</p> <ul style="list-style-type: none"> <li>• Brake Pedal Status</li> <li>• Vehicle Speed</li> <li>• ESP Status</li> </ul>  <p>Reference service manual RAM-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITBM) / Diagnose and Testing</p> <p>Switch Inputs</p> <ul style="list-style-type: none"> <li>• Inputs for gain</li> <li>• Inputs from the manual slider</li> <li>• Leads directly to the trailer brake control module</li> </ul>  <p>Reference service manual RAM-28 - DTC-Based Diagnostics / MODULE, Integrated Trailer Brake (ITBM) / Diagnose and Testing</p>

'437 Patent Claim	Continental's ITBC
<p>the towing vehicle communication bus interconnects a plurality of components on the towing vehicle</p>	<p>RAM wiring diagrams show many components communicating over the communication bus.</p>  <p>Trailer brake control module output to trailer using PWM to control the brake force</p> <p>CAN communication is established with the following components</p> <ul style="list-style-type: none"> <li>• Brake Pedal Status</li> <li>• Vehicle Speed</li> <li>• ESP Status</li> </ul> <p>Switch Inputs</p> <ul style="list-style-type: none"> <li>• Inputs for gain</li> <li>• Inputs from the manual slider</li> <li>• Leads directly to the trailer brake control module</li> </ul> <p>Reference service manual RAM-28 - DTC-based Diagnostics / MODULE, Integrated Trailer Brake (ITBM) / Diagnose and Testing</p> <p>Reference service manual RAM-28 - DTC-based Diagnostics / MODULE, Integrated Trailer Brake (ITBM) / Diagnose and Testing</p> <p>Reference service manual RAM-28 - DTC-based Diagnostics / MODULE, Integrated Trailer Brake (ITBM) / Diagnose and Testing</p>



'437 Patent Claim	Continental's ITBC
and is externally connected to the brake controller.	<p>RAM wiring diagrams show the external connection of the communication bus to the ITBC.</p>  <p>Trailer brake control module output to trailer using PWM to control the brake force</p> <p>CAN communication is established with the following components</p> <ul style="list-style-type: none"> <li>• Brake Pedal Status</li> <li>• Vehicle Speed</li> <li>• ESP Status</li> </ul> <p>Switch Inputs</p> <ul style="list-style-type: none"> <li>• Inputs for gain</li> <li>• Inputs from the manual slider</li> <li>• Leads directly to the trailer brake control module</li> </ul> <p>Reference service manual RWA-28 - DTC-based Diagnostics / MODULE, Integrated Trailer Brake (ITB) / Diagnose and Testing</p>

53. Continental's ITBC includes each of the limitations in, at least, claim 1 of the '437 Patent. Therefore, Continental's ITBC infringes the '437 patent.

54. The only intended and feasible use for Continental's ITBC is as an ITBC.

55. Because the only intended and feasible use of Continental's ITBC is an infringing use, Continental's ITBC has no substantial non-infringing uses.

56. Continental has induced infringement of the '437 patent at least because, with knowledge of the '437 patent, it intentionally and actively induced end users of Continental's ITBC (through instructions, videos, and otherwise) to use them in a manner that infringes the '437 patent with specific intent that they do so.

57. Continental has further induced infringement of the '437 patent at least by selling Continental's ITBC to distributors, retailers, and other resellers with specific intent that they infringe the '437 patent by reselling Continental's ITBC to others.

58. Continental has contributed to infringement of the '437 patent at least by selling Continental's ITBC, which has no substantial use other than an infringing use as an ITBC.

59. Continental's direct and indirect infringement of the '437 patent was, and continues to be, willful and deliberate.

60. Horizon has been and will continue to be damaged by Continental's infringing activities. Continental's infringing activities, upon information and belief, have caused loss of business, which in turn hurts the local economy and causes local people to lose their jobs.

61. Horizon has suffered irreparable harm due to Continental's

infringement and will continue to be irreparably harmed unless and until is enjoined by this Court.

**PRAYER FOR RELIEF**

WHEREFORE, Horizon demands judgment in its favor and against Continental on Counts I-IV, including, but not limited to, an Order:

A. Finding that Continental has directly infringed one or more claims of each of the Patents, under 35 U.S.C. § 271(a);

B. Finding that Continental has induced infringement of one or more claims of each of the Patents, under 35 U.S.C. § 271(b);

C. Finding that Continental has contributed to the infringement of one or more claims of each of the Patents, under 35 U.S.C. § 271(c);

D. Awarding preliminary and permanent injunctive relief enjoining Continental and its officers, directors, managers, employees, affiliates, agents, representatives, parents, subsidiaries, successors, assigns, those in privity with them, and all others aiding, abetting, or acting in concert or active participation therewith, from: (1) making, using, selling, offering to sell, or importing into the U.S. any device covered by or implementing a method covered by any of the Patents; or (2) otherwise directly or indirectly infringing any of the Patents.

E. Awarding compensatory damages under 35 U.S.C. § 284;

F. Awarding treble damages under 35 U.S.C. § 284;

- G. Requiring that Continental account to Horizon for all sales, revenues, and profits derived from its infringing activities and that three times those profits be disgorged and paid to Horizon under 35 U.S.C. § 284;
- H. Awarding attorneys' fees under 35 U.S.C. § 285;
- I. Awarding pre-judgment and post-judgment interest;
- J. Awarding Horizon its costs in this action; and
- K. Awarding such other and further relief as allowed at law or in equity that this Court deems to be appropriate.

**JURY DEMAND**

Horizon demands a trial by jury on all issues so triable.

Dated: July 10, 2020

Respectfully submitted,

Horizon Global Americas, Inc.

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*Attorneys for Plaintiff Horizon Global Americas Inc.*